

AMENDMENTS TO THE ABSTRACT:

B Please amend the Abstract as follows:

~~INTERFACE DEVICE~~

ABSTRACT OF THE DISCLOSURE

~~The present invention relates to an interface device and, in particular an~~
~~interface device for providing~~ communication security services. ~~The problem of~~
~~providing communication security services to, for example, a pair of host computers that~~
~~must communicate over an insecure public network is a widely addressed one. It is~~
~~known to provide cryptographic functionality to a host computer such that data traffic~~
~~transmitted by the host computer can be secured. However a major weakness of known~~
~~methods is that such cryptographic processing is either carried out on the host or such~~
~~that, following passing the data to be secured to an additional cryptographic accelerator~~
~~device plugged into the host, the cryptographically processed data is passed back to the~~
~~host before subsequent transmission. Both such methods give rise to a situation where, in~~
~~the event of the host operating system being subverted, the original data and the~~
~~cryptographically processed data are able to be simultaneously gathered on the host,~~
~~giving rise to the classic "known plaintext" attack on the cryptographic key used in the~~
~~encryption operation. According to the present invention however, an interface device is~~
~~provided comprising a~~ A first interface is provided ~~for receiving data from a first zone in~~

a first zone data format; ~~means for processing said received~~ Received data is processed through performance of a cryptographic operation on at least a portion thereof; ~~a~~ a second interface is provided for sending ~~said~~ the processed data to a second zone in a second zone data format; ~~and means arranged to pass said.~~ The processed data is then passed exclusively from ~~said~~ such processing ~~means~~ to said the second interface. In this way, in enforcing a unidirectional flow of information through the device and isolating all the necessary functionality (including, for example, the cryptographic key) on the device, ~~the~~ problems of the prior art are advantageously avoided.

Figure (3)